

Remarks/Arguments

The Office Action mailed October 31, 2007 has been reviewed and carefully considered.

Claims 1, 3-15 and 17 have been amended. No new matter has been added. Claim 2 has been canceled without prejudice. Claims 1 and 3-17 are now pending in this application.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested. It should be noted that the Applicants are not conceding in this application that the amended claims in their prior form are not patentable over the art cited by the Examiner, as the present claim amendments have been made only to facilitate expeditious prosecution of the application. The Applicants respectfully reserve the right to pursue these and other claims in one or more continuations and/or divisional patent applications.

Claims 1-17 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ghosh et al. (U.S. Publication No. 2001/005272 A1) (hereinafter 'Ghosh').

Prior to addressing the outstanding rejections, the Applicants will briefly summarize the present principles to better assist the Examiner in appreciating the differences between the claimed invention and the prior art references. In accordance with aspects of the present principles, a barrier laminate that may be employed as a surface film of electroluminescent devices, such as organic light emitting diode (OLED) displays. With reference to FIG. 1 of the Specification, typical surface films include alternating layers of planarisation materials (2) and barrier materials (3), which may include polymer materials and inorganic materials, respectively, to prevent diffusion of oxygen and/or water through the film and thereby protect a device surface from environmental degradation. However, these types of films do not provide adequate protection against diffusion of air and water through the sides of the film, as air and water may reach a device surface by subverting alternating layers of barrier and planarisation materials.

According to aspects of the present principles, a discontinuous layer (4) having alternating portions of planarisation material (4) and barrier material (6) may be included within a barrier laminate (see, e.g., Specification, FIG. 1). The configuration of the

discontinuous layer (4) provides several alternating portions of planarisation material and barrier material within the path between a device surface and the sides of the laminate through which oxygen and/or air may penetrate. In one implementation of the present principles, the discontinuous layer (4) may be provided above and/or below a device layer within a stack (see, e.g., Specification, FIG. 1; and p. 7, lines 1-5, describing an example of a stack as including a 'base substrate, barrier laminate, device, and barrier laminate').

Claim 1 of the present application recites:

A barrier laminate including barrier and planarisation materials for use with a device layer, comprising:

- a device layer; and
- at least one discontinuous layer of a planarisation material external to the device layer within a stack including the device layer, wherein the at least one discontinuous layer is divided into unconnected areas distributed along a plane, wherein the unconnected areas are separated by regions of a barrier material, and

wherein the barrier material separating the unconnected areas is external to the device layer.

Ghosh discloses a method for producing a thin film encapsulation for organic light emitting diode devices that is completely different from aspects of the present principles. According to the teachings of Ghosh, with reference to FIG. 3 of Ghosh, a series of OLED devices (3) situated on a substrate (2) is covered with a polymer material (21). The polymer material (21) is disjointed to expose portions of a substrate (2) (see, Ghosh, FIG. 5). Thereafter an inorganic material (22) may be deposited over the polymer material and the substrate (see Ghosh, FIG. 3). Upon overlaying another coating of polymer material (23), the slab (20) is diced along the barrier material between disjointed portions of polymer material to form several OLED devices (30, FIG. 4) encapsulated with a thin film (21, 22, 23, FIG. 4) (see also, Ghosh, paragraph 20).

Ghosh does not disclose or remotely suggest that barrier materials separating unconnected portions of planarisation materials are external to a device layer, as recited in claim 1. Unlike aspects of the present principles discussed above, the barrier portions separating disjointed polymer portions in the Ghosh film do not provide several, alternating barrier obstructions between a device layer and the sides of the film. Indeed, FIG. 3 clearly illustrates that the inorganic material (22) separating the disjointed

polymer portions (21) are actually within the device layer (3). Accordingly, claim 1 is not anticipated by Ghosh, as Ghosh fails to disclose that barrier materials separating unconnected portions of planarisation materials are external to a device layer.

Moreover, it should also be noted that claim 1 is not rendered obvious by Ghosh. The barrier portions separating the disjointed polymer portions in the Ghosh film simply act as a guide indicating where the slab (20) should be cut to form device (30), as depicted in FIGS. 3 & 4 of Ghosh. Based on Ghosh, one of ordinary skill in the art would not conceive of employing barrier portions separating unconnected areas of planarisation material external to a device layer within a stack to act as a barrier laminate. Thus, claim 1 is believed to be patentable.

In addition, claims 14 and 15 are also believed to be patentable for at least the reasons discussed above. Claim 14 recites, *inter alia*:

- depositing a continuous layer of a planarisation material;₁
- removing regions of said layer of a planarisation material;₁ and
- filling said regions with a barrier material to form a barrier laminate layer external to the device layer within a stack including the device layer such that the barrier material filling said regions is external to the device layer.

Similarly, claim 15 recites, *inter alia*:

- depositing a patterned layer of a planarisation material, whereby regions where no planarisation material is deposited are formed;₁ and
- filling said regions with a barrier material to form a barrier laminate layer external to the device layer within a stack including the device layer such that the barrier material filling said regions is external to the device layer.

Accordingly, claims 14 and 15 are believed to be patentable over Ghosh at least because Ghosh fails to disclose or render obvious a barrier laminate with barrier materials separating unconnected portions of planarisation materials that are external to a device layer. Furthermore, claims 1-13 and 16-17 are believed to be patentable due at least to their dependencies from claims 1 and 15.

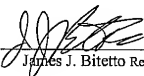
In view of the foregoing, the Applicants respectfully request that the rejections of the claims set forth in the Office Action of October 31, 2007 be withdrawn, that pending

claims 1 and 3-17 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to applicant's representatives Deposit Account No. 14-1270.

Respectfully submitted,

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By: 
James J. Bitetto Reg. No. 40,513

/Frank Keegan/

Frank Keegan Reg. No. 50,145

Correspondence Address:

**Philips Intellectual Property & Standards
P.O. Box 3001
Briarcliff Manor, NY 10510**